

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

**Complete if Known**

Application Number	10/687,140
Filing Date	October 16, 2003
First Named Inventor	Yaming Jin
Art Unit	1754
Examiner Name	Not Yet Assigned
Attorney Docket Number	1856-20401

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
JF		US- 2,892,858	06-30-1959	Ziegler	
		US- 3,852,190	12-03-1974	Buss et al.	
		US- 4,012,313	03-15-1977	Buss et al.	
		US- 4,063,851	12-20-1977	Weldon	
		US- 4,224,192	09-23-1980	Foster et al.	
		US- 4,387,085	06-07-1983	Fanelli et al.	
		US- 4,617,183	10-14-1986	Lewis et al.	
		US- 4,708,945	11-24-1987	Murrell et al.	
		US- 4,744,974	05-17-1988	Lewis et al.	
		US- 4,831,007	05-16-1989	Murrell et al.	
		US- 4,891,127	01-02-1990	Murrell et al.	
		US- 5,055,019	10-08-1991	Meyer et al.	
		US- 5,102,851	04-07-1992	Eri et al.	
		US- 5,116,879	05-26-1992	Eri et al.	
		US- 5,134,107	07-28-1992	Narula	
		US- 5,232,580	08-03-1993	Le et al.	
		US- 5,837,634	11-17-1998	McLaughlin et al.	
		US- 6,063,358	05-16-2000	Lindquist et al.	
		US- 6,224,846	05-01-2001	Hurlburt et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
JF  ✓		GB 640,965	08-02-1950	Anglo-Iranian Oil Co.		
		GB 2 352 194 A	01-24-2001	Sasol Technology		
		WO 02/07883 A2	01-31-2002	Sasol Technology		
		WO 99/42214	08-26-1999	Sasol Technology		

Examiner  
SignatureDate  
Considered

4/26/07

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet	2	of	5
-------	---	----	---

**Complete if Known**

Application Number	10/687,140
Filing Date	October 16, 2003
First Named Inventor	Yaming Jin
Art Unit	1754
Examiner Name	Not Yet Assigned
Attorney Docket Number	1856-20401

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner  
Signature

Date  
Considered

4/26/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

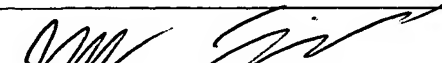
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/687,140
				Filing Date	October 16, 2003
				First Named Inventor	Yaming Jin
				Group Art Unit	1754
				Examiner Name	Not Yet Assigned
Sheet	3	of	5	Attorney Docket Number	1856-20401

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
JF		IHNS SCHULZ; Short History and Present Trends of Fischer-Tropsch Synthesis; Abstract; Universit Karlsruhe, Germany; 10 pages.	
		M. ABSI-HALABI, et al.; "Studies on Pore Size Control of Alumina: Preparation of Alumina Catalyst Extrudates with Large Unimodal Pore Structure by Low Temperature Hydrothermal Treatment"; Preparation of Catalysts V, 1991 Elsevier Science Publishers B.V., Amsterdam, pp. 155 - 163.	
		ALCOA WORLD CHEMICAL; "High purity, high density, gamma phase alumina"; ALCOA Product Data USA/6080-RO2/0601; 2 pages.	
		ALCOA WORLD CHEMICAL; "High purity, high density, boehmite aluminas"; ALCOA Product Data Sheet USA/6070-RO4/0801; 2 pages.	
		CONDEA; "High purity activated aluminas PURALOX, CATALOX"; Product Information Sheet 10/99; 6 pages	
		RONG-SHENG ZHOU, et al.; "Structures and Transformation Mechanisms of the $\eta$ , $\gamma$ and $\theta$ Transition Aluminas"; International Union of Crystallography 1991; Institute for Ceramic Superconductivity, New York State College of Ceramics, Alfred University, Alfred, NY 14802, USA; pp. 617-630	
		RICHARD L. SMITH, et al.; "The Influence of Diaspore Seeding and Chlordie Concentration on the Transformation of 'Diasporic' Precursors to Corundum"; Journal of the American Ceramic Society, October 16, 2000; 31 pages.	
		S. MATSUDA, et al.; "A New Support Material for Catalytic Combustion Above 1000°C"; 8th International Congress on Catalysis; Vol. IV: Impact of surface science on catalysis, structure-selectivity/activity correlations, new routes for catalyst synthesis, pages IV-879-IV-889.	
		H.C. STUMPF, et al.; "Thermal Transformations of Aluminas and Alumina Hydrates"; Industrial and Engineering Chemistry, Vol. 42, No. 7, July 1950; pages 1398-1403.	
		SHU-HUI CAI, et al.; "Atomic Scale Mechanism of the Transformation of $\gamma$ -Alumina to $\theta$ -Alumina"; The American Physical Society 2002; Physical Review Letters, Vol. 89, No. 23; December 2, 2002; 4 pages.	
		ZHONG-WEN LIU, et al.; "Partial Oxidation of Methane Over Nickel Catalysts Supported on Various Aluminas"; Korean J. Chem. Eng., Vol. 19, No. 5, pages 735-741 (2002).	

Examiner Signature		Date Considered	4/26/07
--------------------	---	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

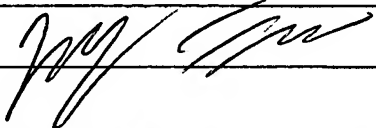
<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/687,140
				Filing Date	October 16, 2003
				First Named Inventor	Yaming Jin
				Group Art Unit	1754
				Examiner Name	Not Yet Assigned
Sheet	4	of	5	Attorney Docket Number	1856-20401

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
JF		HYUN-SEOG ROH, et al.; "Partial Oxidation of Methane Over Ni/θ-A1 <sub>2</sub> O <sub>3</sub> Catalysts"; Chemistry Letters 2001; March 19, 2001; pages 666-667.	
		HYUN-SEOG ROH, et al.; "Partial Oxidation of Methane Over Ni/Ce-ZrO <sub>2</sub> /θ-A1 <sub>2</sub> O <sub>3</sub> "; Korean J. Chem. Eng., Vol. 19, No. 5; pages 742-748 (2002).	
		HIROMICHI ARAI, et al.; "Thermal stabilization of catalysts supports and their application to high-temperature catalytic combustion"; Applied Catalysis A: General 138 (1996); pages 161-176; Elsevier Science Publishers B.V., Amsterdam.	
		BERNARD BEGUIN et al.; "Stabilization of alumina by addition of lanthanum"; Applied Catalysis A: General 138 (1996); pages 161-176; Elsevier Science Publishers B.V., Amsterdam.	
		FRANCOIS OUDET, et al.; "Thermal Stabilization of Transition Alumina by Structural Coherence with LnAlO <sub>3</sub> (Ln = La, Pr, Nd)"; Journal of Catalysts Vol. 114; pages 112-120 (1988).	
		H. SCHAPER, et al.; "The Influence of Lanthanum Oxide on the Thermal Stability of Gamma Alumina Catalyst Supports"; Applied Catalysis, Vol. 7 (1983), pages 211-220; Elsevier Science Publishers B.V., Amsterdam.	
		JALAJAKUMARI NAIR, et al.; "Pore Structure Evolution of Lanthana-Alumina Systems Prepared Through Coprecipitation"; J. Am Ceram. Soc., Vol. 83, No. 8; pages 1942-46 (2000).	
		S. N. RASHKEEV, et al.; "Transition metal atoms on different alumina phases: The role of subsurface sites on catalytic activity"; Physical Review B, Vol. 67, No. 115414; 4 pages.	
		HENNIE SCHAPER, et al.; "Thermal Stabilization of High Surface Area Lumina"; Solid State Ionics, Vol. 16 (1985), pages 261-266.	
		XIAOYIN CHEN, et al.; "High temperature thermal stabilization of alumina modified b lanthanum species"; Applied Catalysis A: General, Vol. 205 (2001); pages 159-172.	
		S. SUBRAMANIAN, et al.; "Characterization of lanthana/alumina composite oxides"; Journal of Molecular Catalysis, Vol. 69 (1991); pages 235-245.	
		P. SOUZA SANTOS, et al.; "Standard Transition Aluminas. Electron Microscopy Studies"; Materials Research, Vol. 3, No. 4; pages 104-114 (2000).	
		M. ABSI-HALABI, et al., "Preparation of Catalysts V", Elsevier Science Publishers B.V., Amsterdam (1991), pages 155-163.	

Examiner Signature		Date Considered	4/26/07
-----------------------	---	--------------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

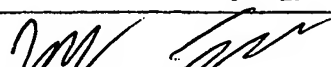
<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/687,140
				Filing Date	October 16, 2003
				First Named Inventor	Yaming Jin
				Group Art Unit	1754
				Examiner Name	Not Yet Assigned
Sheet	5	of	5	Attorney Docket Number	1856-20401

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
JF		H. PHAM, et al.; "The synthesis of attrition resistant slurry phase iron Fischer-Tropsch catalysts"; Catalysis Today, Vol. 58 (2000) pages 233-240.	
↓		E.R. BECKER, N.Y., Marcel Dekker Inc.; "Design of Fischer-Tropsch Catalysts," pages 215-225.	

Examiner Signature		Date Considered	4/26/07
--------------------	---	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Form PTO-1449 (Modifications)

Atty. Docket No.  
1856-20401 (9497.0-01)Serial No.  
10/687,140**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
(Use several sheets if necessary)Applicant  
Yaming Jin, et al.Filing Date  
October 16, 2003Group  
1754**REFERENCE DESIGNATION U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
TF	AA	3,669,904	06/13/1972	Cornelius et al.	252	465	05/28/1970
↓	AB	3,894,963	07/15/1975	Gerdes et al.	252	464	01/16/1973
	AC	6,503,867	01/07/2003	Stamires et al.	502	335	08/11/2000

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**


EXAMINER

DATE CONSIDERED

4/26/07

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



Form PTO-1449 (Modified)

Atty. Docket No.  
1856-20401 (9497.0-01)Serial No.  
10/687,140**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
(Use several sheets if necessary)Applicant  
Yaming Jin, et al.Filing Date  
October 16, 2003Group  
1754**REFERENCE DESIGNATION U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
JF	AA	6271432	08/07/2001	Singleton et al.	585	700	12/20/2000

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

JF	AB	Database CAPLUS on STN Chemical Abstract (Columbus Ohio, USA) CA:2000:795147, Fishcer-Tropsch Catalyst, American Chemical Society (2000), 220 <sup>th</sup> , Fuel-048 see abstract
✓	AC	PCT International Search Report for International Application No. PCT/US03/33460 dated March 5, 2004 (2 p.)

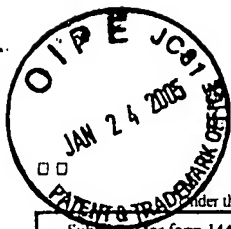
EXAMINER

DATE CONSIDERED

4/26/07

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP '609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

130904.01/1856.20401



PTO/SB/08A (08-03)  
Approved for use through 07/31/2006. OMB 0651-0031  
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/687.140
				Filing Date	October 16, 2003
				First Named Inventor	Yaming Jin
				Group Art Unit	1754
				Examiner Name	
Sheet	1	of	1	Attorney Docket Number	1856-20401 (9497.0-01)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
JF ↓	AA	US-4602000	07/22/1986	Dupin et al.	
	AB	US-5874381	02/23/1999	Bonne et al.	
	AC	US-6806226	10/19/2004	Van Berge et al.	
	AD	US-6835690	12/28/2004	Van Berge et al.	
	AE	US-2003/0162849	08/28/2003	Van Berge et al.	
	AF	US-2004/0186188	09/23/2004	Van Berge et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
JF ↓	AG	WO 03/012008 A2	02/13/2003	Sasol Technology		
	AH	WO 01/87480 A1	11/22/2001	Perial Chemical Industries PLC		
	AI	WO 01/76735 A1	10/18/2001	Phillips Petroleum Company		
	AJ	WO 00/45948	08/10/2000	Sasol Technology		
	AK	ZA 2001/6213	07/27/2001	Sasol Technology		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>7</sup>

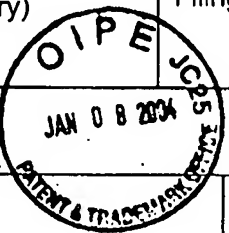
Examiner Signature		Date Considered	4/26/07
-----------------------	--	--------------------	---------

\*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached. The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2



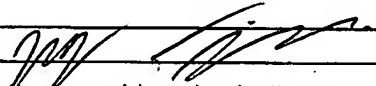
Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office <b>INFORMATION DISCLOSURE          STATEMENT</b> IN AN APPLICATION (Use several sheets if necessary)				Docket No. H1799-00226		Serial No. 10/697,140	
				Applicant: Todd M. WENGER et al.			
				Filing Date: 30 October 2003		Group Art Unit Unassigned	



U.S. PATENT DOCUMENTS							
*EXAM INER INITIA L	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
JF             V	858,258	June 1907	Briscoe et al.				
	2,737,370	March 1956	Frisch et al.				
	4,830,100	May 1989	Kato et al.				
	5,467,816	Nov. 1995	Larinoff				
	5,511,613	April 1996	Mohn et al.				
	5,960,866	Oct. 1999	Kimura et al.				
	6,125,035	Sept. 2000	Hood, III et al.				
	6,234,210	May 2001	Millas				

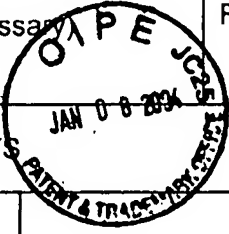
FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATIO N	
						YES	NO
JF       	58-19636	Feb. 1983	Japan			<input type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

OTHER (Including Author, Title, Date, Pertinent Pages, Etc.)							

EXAMINER 	DATE CONSIDERED 9/26/07
--	-------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

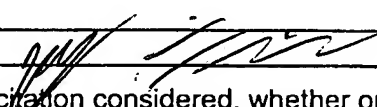
Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)				Docket No. H1799-00226		Serial No. 10/697,140	
				Applicant: Todd M. WENGER et al.			
				Filing Date: 30 October 2003		Group Art Unit Unassigned	



U.S. PATENT DOCUMENTS						
*EXAM INER INITIA L	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
JF	6,382,307	May 2002	Wang et al.			
↓	6,400,565	June 2002	Shabbir et al.			
	6,408,934	June 2002	Ishida et al.			

FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

OTHER (Including Author, Title, Date, Pertinent Pages, Etc.)		

EXAMINER 	DATE CONSIDERED: 4/26/07
--	--------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** ( Not for submission under 37 CFR 1.99)

Application Number	10687140
Filing Date	2003-10-16
First Named Inventor	Yaming Jin
Art Unit	1754
Examiner Name	
Attorney Docket Number	1856-20401 9497.0-01

## **U.S. PATENTS**

[Remove](#)

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
JF	1	4499203		1985-02-12	Toulhoat et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

[Add](#)

## **U.S. PATENT APPLICATION PUBLICATIONS**

[Remove](#)

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
JF	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

[Add](#)

## **FOREIGN PATENT DOCUMENTS**

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
JF	1	2004/035194	WO		2004-04-29	ConocoPhillips Company		<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button.

[Add](#)

## **NON-PATENT LITERATURE DOCUMENTS**

[Remove](#)

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>

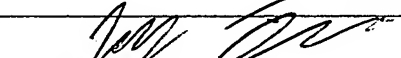
**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10687140
Filing Date	2003-10-16
First Named Inventor	Yaming Jin
Art Unit	1754
Examiner Name	
Attorney Docket Number	1856-20401 9497.0-01

1	European Supplementary Search Report for International Application EP03809188.0-2103 dated February 14, 2006	<input type="checkbox"/>
---	--	--------------------------

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	8/26/07
--------------------	---	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

□ □

PTO/SB/08A (08-03)  
 Approved for use through 07/31/2006. OMB 0631-0031  
 U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/687,140
		Filing Date	October 16, 2003
		First Named Inventor	Yaming Jin
		Group Art Unit	1754
		Examiner Name	
Sheet 1 of 1	Attorney Docket Number	1856-20401 (9497.0-01)	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>3</sup> (if known)			
JF	AA	US-3,628,914	12-21-1971	Graulier	
	AB	US-4,002,720	01-11-1977	Whellock et al.	
	AC	US-5,244,648	09-14-1993	Dupin et al.	
	AD	US-6,066,308	05-23-2000	Dupin et al.	
	AE	US-6,773,690	08-10-2004	Nowack et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number + Kind Code <sup>3</sup> (if known)				
JF	AF	GB 1,058,988	02-15-1967			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>7</sup>

Examiner Signature		Date Considered	4/26/07
--------------------	--	-----------------	---------

158673.01/1856.20401

\*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2